

June 22, 1977

Environmental Protection Agency
Office of Toxic Substances (WH-557)
401 M Street S. W.
Washington, D. C. 20460

ATTENTION: Joni T. Repasch

Dear Ms. Repasch:

Thank you for the opportunity to review the proposed regulations for handling and disposal of polychlorinated biphenyls (PCBs). As an electric utility with every capacitor in our system filled with PCBs, we are greatly concerned with this problem. When the environmental effects of PCBs became widely known we developed careful procedures for the handling and disposal of PCBs and ceased buying any PCB-filled capacitors or transformers. Many of the proposed regulations have been an important part of our procedures for some time. Since early 1976 we have removed 60,170 pounds of PCBs from our electrical system and have shipped them to an approved disposal site in Idaho. My staff has been analyzing the alternatives that have developed for PCB fluids to hopefully ensure introduction of the least environmentally harmful dielectric fluid.

We support EPA Office of Toxic Substances' efforts to encourage proper handling and disposal of PCBs. However, after an analysis of the proposed regulations by a number of my staff, we find the regulations to be unduly complex and confusing. To be effective controls, the regulations must be simplified but not in turn weakened. The proposed regulations for PCBs are in direct contradiction to the new administration's commitment to clear and concise federal regulations. The success of proper removal of PCBs from the environment ultimately is dependent on those who use or dispose of PCBs and confusing regulations will serve only to inhibit proper action. Uniform dates for marking is an example of simplified regulations.

Initial regulations establishing a standard of five hundred parts per million (ppm) is reasonable; however, given the evidence of adverse effects at much lower concentrations, we encourage EPA to continue their study to determine if this is an appropriate level.

It is unclear whether other commercial chemicals such as chlorinated solvents which may contain PCB concentrations greater than 500 ppm are included in the regulations. The narrative discussion of the proposed regulations (p. 26565) indicates they are not included; however, in the definition of "PCB mixture" (7261.2 v) this is not clear.

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- "99" (handwritten)
- "220.6" (handwritten)
- "497" (handwritten)
- A circled stamp containing "747"
- "1082" (handwritten)
- "200" (handwritten)

Environmental Protection Agency
Page two
June 22, 1977

Total destruction of PCBs is a preferable method for disposal because the risk of the chemical being released into the environment at some future unknown date would always be present in a chemical waste landfill. However, high temperature incineration is extremely expensive. There is no approved incinerator on the west coast and this raises the costs of transportation even further. Unless EPA established a certified incinerator no further away than Idaho, it will be too expensive to transport PCB contaminated materials. The effect would be to discourage our utility and others in similar situations from removing PCBs from the system.

It is unclear whether the regulations mandate draining non-leaking PCB capacitors and disposing of the PCB fluid separately from the container until July 1, 1979. This method destroys an excellent container for the fluid (the capacitor itself) and inevitably introduces more PCBs into the environment through this process. A preferable method would be to leave the fluid intact and dispose of the entire capacitor. What is the risk analysis in disposal of PCBs through draining capacitors and transformers as opposed to leaving PCBs in non-leaking capacitors and transformers and disposing of the entire article in a chemical waste landfill? We feel the latter alternative would probably involve the least risk.

With the urgent need for conserving energy, it seems tremendously wasteful to incinerate most of the PCB articles and containers. Alternative methods, such as decontaminating PCB articles and melting them down in a blast furnace, should be aggressively explored by EPA. This would be preferable to creating PCB contaminated solid residues from incineration which must in turn be disposed of properly.

In discussing standards for incineration of PCBs (p. 26568) you referred to available carbon adsorption technology to remove PCB residues. Some months ago we were attempting to locate an adsorbent to aid in clean-up following PCB spills and the EPA Office of Toxic Substances Region X indicated that an acceptable adsorbent did not presently exist for PCBs. Is this the case? If not, we would appreciate any information regarding acceptable technologies for removal of PCB residues.

An additional point of concern is in regard to acceptable solvents. Annex IV of the proposed regulations require a solvent to be used for decontamination. The narrative discussion suggests that kerosene should be used as a PCB solvent (p. 26569). However, the University of Washington Environmental Health Department has recommended trichloroethylene and EPA Office of Toxic Substances Region X has recommended trichlorobenzene. In addition, both groups indicated that trichloroethylene and trichlorobenzene were as environmentally unsuitable as PCBs and they should be handled with equal care. Unless there is a solvent which is environmentally suitable, it seems ridiculous to decontaminate surfaces or containers with a fluid which is similar to PCBs in its adverse environmental impacts. With respect to our

earlier comments, Seattle City Light would prefer to decontaminate surfaces and containers but is concerned with locating an acceptable solvent. EPA should recommend such a solvent.

We applaud EPA's efforts to prevent chemical wastes stored in approved landfills from contaminating our water systems. Given the environmental effects of PCBs, this stringent protection is mandatory and should not be weakened. However, because of the severity of the problem, we feel landfills should never be placed within the 100 year floodplain. Surface water diversion dikes, which have often been known to fail (The Coevolution Quarterly, Winter, 1976/77, p. 29), are inadequate to prevent PCBs and other chemical wastes from being introduced into the environment. In addition, much of the prime agricultural land in the U. S. lies within the floodplain and to remove these lands for a landfill would further intensify the problem of supplying our nation with adequate food. In short, there are numerous other lands for which a chemical waste landfill would be more acceptable and EPA should prohibit landfills within the floodplain.

Because of the adverse financial impact these regulations would place on utilities, especially those on the west coast, it would undoubtedly result in more PCBs remaining in the system and increasing the risk of PCBs being introduced into the environment which is in direct contradiction to the intent of the Toxic Substances Control Act of 1976. If the process must be so costly, some incentives should be established in order to encourage proper disposal. A federal "bounty" program (p. 26568) or a program in which utilities pay the costs associated with transportation of capacitors to a regional collection point whereupon the Federal government would be responsible for disposal of the contaminated material at that time would serve this purpose.

Removal of polychlorinated biphenyls from the electric system is predicated on the existence of a non-PCB dielectric fluid which is environmentally suitable. As I indicated, my staff is examining the fluids and the preliminary analysis indicates that the four major capacitor fluids may not be environmentally acceptable in the long term. My staff has discussed this with EPA Office of Toxic Substances (Washington, D.C.) and they indicated that EPA will probably not be analyzing the alternative fluids at least until December. This puts Seattle City Light and other electric utilities in a precarious position. We are told to remove PCBs from our system, and rightfully so, but are given no guidance as to a substitute fluid. This fall we must buy additional capacitors to replace the PCB-filled units that we have been removing. Because we must rely on the few research results supplied to us by the vendors of the non-PCB capacitors, which have aroused our suspicions as to whether they are environmentally suitable, we risk introduction of a fluid which may damage our environment further. EPA should be very concerned about this problem and we strongly urge the Office of Toxic Substances to examine the proposed non-PCB dielectric fluids for a recommendation to the utility industry.

Environmental Protection Agency
Page four
June 22, 1977

Seattle City Light would have appreciated the opportunity to comment further; however, we only received the proposed regulations from our local EPA Office on June 10, 1977. We had one week for numerous members of my staff in different divisions of the utility to examine the proposed regulations. With regulations affecting our operations substantially, EPA should have ensured a longer review period or sent us our copy on May 24, 1977.

To summarize, Seattle City Light is very concerned with the problem of polychlorinated biphenyls and is actively pursuing a program to properly handle and dispose of PCBs which are present in our system. We are encouraged by EPA's efforts; however, we find many of the proposed regulations to be unnecessarily complex and confusing. Serious questions have been raised with respect to certain procedures and it is our hope that EPA will give them serious consideration. Of particular concern is the absence of a west coast certified incinerator and EPA's lack of commitment to aiding utilities in the environmental analysis of non-PCB fluids which will undoubtedly benefit the nation as a whole. Please keep Seattle City Light informed on any new development with respect to polychlorinated biphenyls and other hazardous wastes. Thank you.

Sincerely,

G. R. G. Sheehan

for GORDON VICKERY
Superintendent

MLO:ct

cc: Dennis Stefani, EPA Office of
Toxic Substances Region X

cc: Vickery
Henault
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